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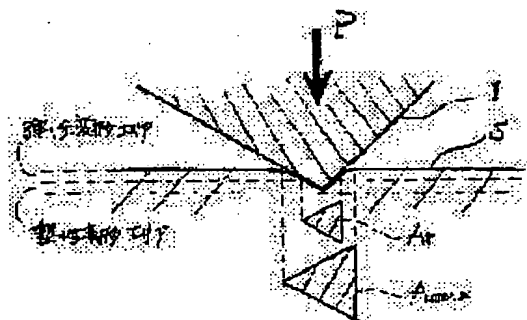
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(54) TITANIUM NITRIDE COATED SLIDING MEMBER EXCELLENT IN WEAR RESISTANCE

(57)Abstract

PROBLEM TO BE SOLVED: To provide a TiN coated sliding member in which the surface of a base material having 300 to 800 Hv hardness is provided with a TiN coating layer, and chipping hardly occurs and having sufficient wear resistance even in high facial pressure sliding conditions.

SOLUTION: The hardness of a base material is 300 to 800 Hv, and, moreover, the difference between the dynamic hardness HD and plastic deformation hardness Hp on the surface of a TiN coating layer measured by continuously loading triangular pyramid indenters of diamond from a load 0 to 5 gf and moreover continuously removing the loads from load 5 to 0 gf is 800 to 1500 kgf/mm². Furthermore, the sound wave generating lowest load La in scratch testing is ≥30 N and moreover, the difference between the load Lc at which the magnitude of the rupture of the TiN coating layer reaches 10 μm diameter and the La is ≥50 N.



$$H_D = P / A_{max}$$
$$H_P = P / A_1$$

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